



# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of  
Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON  
CONTAINING FORMATION TO INCREASE A  
PERMEABILITY OF THE FORMATION

Application Number: 09/841000

Confirmation Number: 4713

First Named Applicant: Eric de Rouffignac

Attorney Docket Number: 5659-02400

Art Unit: 3672

Examiner: George A Suchfield

Search string: ( 4931171 or 4737267 or 4384948 or 3593790  
or 3497000 or 3244231 or 3223166 or 3947656  
or 3165154 or 4458757 ).pn.

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## US Patent Documents

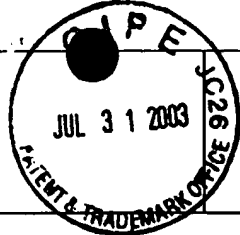
Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
69	1	4931171	1990-06-05	Piotter			
1	2	4737267	1988-04-12	Pao et al.			
	3	4384948	1983-05-24	Barger			
	4	3593790	1971-07-20	Herce			
	5	3497000	1970-02-24	Hujak et al.			
	6	3244231	1966-04-05	Grekel et al.			
	7	3223166	1965-12-14	Hunt et al.			
	8	3947656	1976-03-30	Lodi			
	9	3165154	1965-01-12	Santourian			
69	10	4458757	1984-07-10	Bock et al.			

Signature

Examiner Name	Dat
George Suchfield	10/15/03

Form PTO-1449 (modified)  
List of Patents and Publications  
For Applicant's Information  
Disclosure Statement  
(Use several sheets if necessary)



ATTY. DKT. NO. 5659-024

APPLICANT: de Rouffignac et al.

FILING DATE: April 24, 2001

SERIAL NO. 09/841,000

GROUP: 3672

## U.S. PATENT DOCUMENTS

EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
GS	S5	2,857,002	10/21/1958	Pevere et al.			

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EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
GS	T01	1836876	12/30/1994	SU			Y

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	T03	Burnham et al. "A Possible Mechanism of Alkene/Alkane Production in Oil Shale Retorting, (7 pages).					
	T04	Campbell, et al., "Kinetics of oil generation from Colorado Oil Shale" IPC Business Press, Fuel, 1978, (3 pages).					
	T05	Cummins et al. "Thermal Degradation of Green River Kerogen at 150° to 350 °C", Report of Investigations 7620, U.S. Government Printing Office, 1972, (pages 1-15).					
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	T07	Hill et al., "The Characteristics of a Low Temperature in situ Shale Oil" American Institute of Mining, Metallurgical & Petroleum Engineers, 1967 (pages 75-90)..					
	T08	Dinneen, et al. "Developments in Technology for Green River Oil Shale" United Nations Symposium on the Development and Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-20).					
	T09	De Rouffignac, E. "In Situ Resistive Heating of Oil Shale for Oil Production-A Summary of the Swedish Data, (4 pages).					
	T10	Dougan, et al. "The Potential for in situ Retorting of Oil Shale in the Piceance Creek Basin of Northwestern Colorado", Quarterly of the Colorado School of Mines (pages 57-72).					
	T11	Hill et al. "Direct Production of Low Pour Point High Gravity Shale Oil" I&EC Product Research and Development, 1967, Volume 6, (pages 52-59).					
	T12	Yen et al., "Oil Shale" Developments in Petroleum Science, 5, Elsevier Scientific Publishing Co., 1976 (pages 187-198).					
	T13	SSAB report, "A Brief Description of the Ljungstrom Method for Shale Oil Production," 1950, (12 pages).					
	T14	Salomonsson G., SSAB report, "The Lungstrom In Situ-Method for Shale Oil Recovery, 1950 (28 pages)					
	T15	"Swedish shale oil-Production method in Sweden," Organisation for European Economic Co-operation, 1952, (70 pages).					
	T16	SSAB report, "Kvarn Torp" 1958, (36 pages).					
	T17	SSAB report, "Kvarn Torp" 1951 (35 pages).					
	T18	SSAB report, "Summary study of the shale oil works at Narkes Kvarntorp" (15 pages).					
GS	T19	Vogel et al. "An Analog Computer for Studying Heat Transfrer during a Thermal Recovery Process," AIME Petroleum Transactions, 1955 (pages 205-212).					
*	T20	<del>"SKIFEROLJA GENOM UPPVARMNING AV SKIFFERBERGET," Faxin Department och Namder, 1941, (5 pages)</del>					

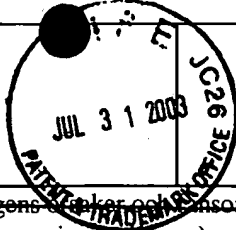
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EXAMINER: George Suchfield

DATE CONSIDERED: 10/15/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified)  
List of Patents and Publications  
For Applicant's Information  
Disclosure Statement  
(Use several sheets if necessary)



ATTY. DKT. NO. 5659-02

SERIAL NO. 09/841,000

APPLICANT: de Rouffignac et al.

GROUP: 3672

FILING DATE: April 24, 2001

* T21	<del>"Aggregeringen av skiffer och oljesoneringar grunder", Av director E.F.Cederlund i Statens livsmedelskommission (1 page).</del>
* T22	<del>Ronby, E. "KVARNTORP-Sveriges Största skifferoljeindustri," 1943, (9 pages)</del>
GS T23	SAAB report, "The Swedish Shale Oil Industry," 1948 (8 pages).
T24	Gejrot et al., "The Shale Oil Industry in Sweden," Carlo Colombo Publishers-Rome, Proceedings of the Fourth World Petroleum Congress, 1955 (8 pages)
T25	Hedback, T. J., The Swedish Shale as Raw Material for Production of Power, Oil and Gas," XIth Sectional Meeting World Power Conference, 1957 (9 pages)
T26	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand", 1955 Vol. 1, (141 pages) English
T27	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Figures", 1955 Vol. 2, (146 pages) English.
T28	"Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Memorandum re: tests", 1955 Vol. 3, (256 pages) English.
T29	Helander, R.E., "Santa Cruz, California, Field Test of Carbon Steel Burner Casings for the Lins Method of Oil Recovery", 1959 (38 pages) English.
T30	Helander et al., Santa Cruz, California, Field Test of Fluidized Bed Burners for the Lins Method of Oil Recovery" 1959, (86 pages) English.
T31	SSAB report, "Bradford Residual Oil, Athabasa Ft. McMurray" 1951, (207 pages), partial translation.
GS T32	"Lins Burner Test Results-English" 1959-1960
* T33	<del>SSAB "Annual Reports, SSAB Laboratory, Address Annually Issues Shale and Ash, Oil, Gas, Waste Water, Analytical", 1953-1954, (166 pages). Swedish</del>
T34	<del>SSAB report, "Financial Matter, Swedish taxes, etc.," 1960-1961 (37 pages). Swedish</del>
T35	<del>SSAB report, "Cost For Mining," 1959-1979 (13 pages). Swedish</del>
T36	<del>SSAB report, "Cost Comparison of Mining and Processing of Shale and Dolomite Using Various Production Alternatives", 1960, (64 pages). Swedish</del>
T37	<del>SSAB report, "Assessment of Future Mining Alternatives of Shale and Dolomite," 1962, (39 pages) Swedish</del>
* T38	<del>SSAB report, "Kartong 2 Shale: Ljungströmsanläggningen" (104 pages) Swedish.</del>
GS T39	SAAB, "Photos", (18 pages).
* T40	<del>SAAB report, "Swedish Geological Survey Report, Plan to Delineate Oil shale Resource in Närke Area (near Kvarntorp)," 1941 (13 pages). Swedish.</del>
T41	<del>SAAB report, "Recovery Efficiency," 1941, (61 pages). Swedish.</del>
T42	<del>SAAB report, "Geologic Work Conducted to Assess Possibility of Expanding Shale Mining Area in Kvarntorp: Drilling Results, Seismic Results," 1942 (79 pages). Swedish</del>
T43	<del>SSAB report, "Ojematinigar vid Norrtorp." 1945 (141 pages).</del>
T44	<del>SSAB report, "Inhopplingschema, Norrtorp II 20/3-17/8", 1945 (50 pages). Swedish</del>
T45	<del>SSAB report, "Secondary Recovery after LINS," 1945 (78 pages)</del>
T46	<del>SSAB report, "Maps and Diagrams, Geology," 1947 (137 pages). Swedish.</del>
T47	<del>SSAB report, "Styrhseprotokoll," 1943 (10 pages). Swedish</del>
* T48	<del>SSAB report, "Early Shale Retorting Trials" 1951-1952, (134 pages). Swedish.</del>

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T49	SSAB report, "Swedish Navy's Gunstrom Oil and its Use as Liquid Fuel," Thesis by E. Pals, 1949 (83 pages). Swedish
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ATTY. DKT. NO. 5659-02 TH1949

SERIAL NO. 09/841,000

APPLICANT: de Rouffignac et al.

GROUP: 3672

FILING DATE: April 24, 2001

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
G9	J19	97/01017	Jan-1997	WO			
G9	AA2	294 809	1988-12-14	EP			

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

G9	G6	Roger, Rude E. "Coalbed Methane: Principles and Practice" Prentice-Hall, Inc. 1994, pp. 164-165.
G9	G9	Hyne, Norman J. Geology for Petroleum exploration, Drilling, and Production. McGraw-Hill Book company, 1984, p. 264.
G9	H2	Hobson, G.D., Modern Petroleum Technology, Halsted Press, Applied Science Publishers LTD. 1973, pp. 786, 787.
G9	L12	Van Krevelen, COAL: Typology-Physics-Chemistry-Constitution, 1993, pp. 27, 42, 52, 322, 323, 324, 325, 326, 526, 527, 726.

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### Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON  
CONTAINING FORMATION TO INCREASE A  
PERMEABILITY OF THE FORMATION

Application Number: 09/841000  
Confirmation Number: 4713  
First Named Applicant: Eric de Rouffignac  
Attorney Docket Number: 5659-02400

Art Unit: 3673

Examiner: George A Suchfield

Search string: ( 3766982 or 3599714 or 4043393 or 4093025  
or 4895206 or 00326439 or 1681523 or  
2244256 or 2714930 or 3547193 or 3562401 or  
4089374 or 4423311 or 4489782 or 4626665 or  
4694907 or 5182792 or 5402847 or 5491969 or  
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4982786 or 5201219 or 5339904 or 3348745 or  
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4501326 or 4524827 or 4585066 or 4776638 or  
4856587 or 5517593 or 5099918 or 5751895 or  
6015015 or 6112808 or 3026940 or 3947683 or  
3285335 or 3456721 or 20020018697 ).pn.

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### US Patent Documents

Not : Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
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69	2	3599714	1971-08-17	Messman et al.
	3	4043393	1977-08-23	Fisher et al.
	4	4093025	1978-06-06	Terry
	5	4895206	1990-01-22	Price
	6	00326439	1885-09-15	McEachen
	7	1681523	1928-08-21	Downey et. al.
	8	2244256	1941-06-01	Looman
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	10	3547193	1970-12-15	Gill
	11	3562401	1971-02-09	Long
	12	4089374	1978-05-16	Terry
	13	4423311	1983-12-27	Varney, Sr.
	14	4489782	1984-12-25	Perkins
	15	4626665	1986-12-02	Fort, III
	16	4694907	1987-09-22	Stahl et. al.
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	19	5491969	1996-02-20	Cohn et. al.
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	31	4524113	1985-06-18	Lesieur
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67	39	4099567	1978-07-11	Terry
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	48	3477058	1968-11-04	Vedder et al.
	49	3580987	1971-05-25	Priaroggia
	50	4193451	1980-03-18	Dauphine
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	53	4456065	1984-06-26	Heim et al.
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	84	3285335	1966-11-15	Reistle
69	85	3456721	1969-07-22	Smith

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
69	1	20020018697	2002-02-14	Vinegar et al.			

## Remarks

Note: Remarks are not for responding to an office action.

This IDS is submitted as part of a Request for Continued Examination (RCE). Foreign applications and other art will be submitted on a Form PTO-1449.

## Signature

Examiner Name	Date
George Suchfield	10/15/03